

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460



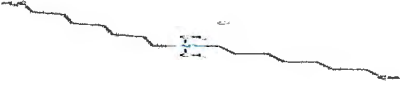
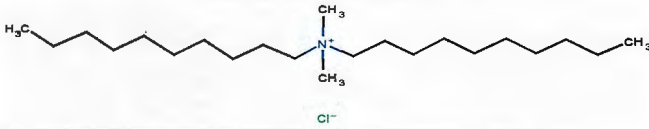


United States  
Environmental Protection  
Agency

**Office of Pesticide Programs**

**Antimicrobials Division (AD)**

April 21, 2014.

EPA Reg#: 4822-594		DP Barcode:419496	
		Submission #: 950725	
Product name: <b>Valhalla</b>		Registrant: (company name)	
Reviewer's name: Salvador Rodriguez		AD/PSB/CTT- Product Chemistry	
Agency due date: 06/03/14		PSB received date: 04/16/14	
CTT received date: 04/16/14		Science due date: 04/19/14	
Formulation type: EUP			
Integrated system: <input type="checkbox"/>	Non integrated system:[X]	Food use: <input type="checkbox"/>	Non food use: [X]
Action Code: 362		Date Completed: April 21, 2014	
PC Code(s)	CAS #(s)	Active Ingredient Names	% wt (label)
069105	68424-85-1	Alkyl* dimethyl benzyl ammonium chloride *(50%C14, 40%C12, 10%C16)	0.096
			
069165	35426-11-2	1-Decanaminium, N,N-dimethyl-N-octyl-, chloride	0.072
			
069166	5538-94-3	1-Octanaminium, N,N-dimethyl-N-octyl-, chloride	0.036
			
069149	7173-51-5	1-Decanaminium, N-decyl-N,N-dimethyl-, chloride	0.036
			
Test Lab: S.C.Johnson & Son, Inc.			
MRID(s): 49333300 & 49333301.			
Approver: Karen P. Hicks		Approved date: April 21, 2014	
Guideline: OPPTS Guideline, 830 series 830.6317 "Storage Stability" & 830.6320 "Corrosion Characteristics".			
Comments:			

*[Signature]*  
(04/23/14)

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WASHINGTON, D.C. 20460



**Antimicrobials Division (AD)**

April 21, 2014

**MEMORANDUM**

**SUBJECT:** Product Chemistry Review for EPA File Symbol. 4822-594  
Product Name: **Valhalla**  
DP Barcode: 419496

**CODE:** 362

**DATE DUE:** 06/03/14

**FROM:** Salvador Rodriguez, Chemist  
Chemistry and Toxicology Team  
Product Science Branch  
Antimicrobials Division (7510P)

**THRU:** Karen Hicks, Team Leader  
Chemistry and Toxicology Team  
Product Science Branch  
Antimicrobials Division (7510P)

**TO:** Velma Noble PM#31/Emilia Oiguenblik  
Regulatory Management Branch II  
Antimicrobials Division (7510P)

**Applicant:** S.C. Johnson & Son, Inc.

A handwritten signature in black ink, appearing to read "K. Hicks", is written over the "THRU:" field.

**PRODUCT FORMULATION FROM LABEL:**

<b><u>Active Ingredient(s):</u></b>	<b><u>% by wt.</u></b>
Alkyl* dimethyl benzyl ammonium chloride *(50%C14, 40%C12, 10%C16)	0.096
1-Decanaminium, N,N-dimethyl-N-octyl-, chloride	0.072
1-Octanaminium, N,N-dimethyl-N-octyl-, chloride	0.036
1-Decanaminium, N-decyl-N,N-dimethyl-, chloride	0.036

## BACKGROUND:

The Registrant, S.C. Johnson & Son, Inc has submitted the OPPTS 830.6317 & 830.6320 guidelines, for the disinfectant, sanitizer, bacteriocide, virucide, non-integrated, non food-use, end-use product, **Valhalla**. The product chemistry reviewer has reviewed the following documents:

- Confidential Statements of Formula, dated 12/07/12, for the basic formulations. (Reference)
- Transmittal document, dated 03/04/14. MRID #: 49333300.
- Statement of Compliance< dated 03/11/12.
- Study Titled: “24-Month Storage Stability OPPTS 830.6317 & Corrosion Characteristics 830.6320”. MRID #: 49333301

## FINDINGS:

1. The OPPTS 830.6317 & 830.6320 guidelines Group B product chemistry data requirements applicable to end-use products have been met. The test substance was stored for two years at (18 - 27°C) in a non-climate controlled warehouse. Data obtained in this study verifies that the test substance is stable for a period of at least two years. MRID #: 49333301.
2. The results of the long-term storage and corrosion characteristics of the test material have been determined. The study is in accordance with the requirements of the US EPA, Office of Prevention, Pesticides and Toxic Substances, Series 830: Products Properties Test Guidelines OPPTS 830.6317 & 830.6320.
3. After 24 months at (18 - 27°C), no pitting, no thinning, no warping, no change in color, no cracks holes or mottling were noted for the commercial packaging material. Upon mechanical deformation, neither the container nor the closure cracked or split. In conclusion there was no significant change in the active ingredient content of the test material during the 12 months storage.

Quaternary surfactant content (% w/w)					
Test item replicate (#)	Initial	3	6 (Months)	9	12
1	0.215	0.234	0.241	0.246	0.236
2	0.210	0.232	0.246	0.238	0.236
3	0.211	0.237	0.232	0.238	0.233
4	0.206	0.238	0.246	0.232	0.239
5	0.209	0.241	0.244	0.235	0.235
6	0.214	0.239	0.245	0.234	0.239
<b>Overall Mean:</b>	<b>0.211</b>	<b>0.237</b>	<b>0.242</b>	<b>0.237</b>	<b>0.239</b>

## CONCLUSIONS:

The Product Science Branch of Antimicrobials finds the OPPTS Guideline Series 830.6317 & 830.6320 Group B product chemistry data requirements applicable for non-integrated, non food-use, end-use product **EPARN: 4822-594** to be acceptable. The results of the “One Year Storage Stability and Corrosion Characteristics” studies indicate that the concentration of the active ingredients (AI), are within the EPA Standard Certified Limits.